

**REMARKS**

Applicants thank the Examiner for the courtesies extended during the telephone interview conducted on December 3, 2003. The claims are amended herein as discussed and suggested during the interview, which is summarized in the attached Statement of Substance of Interview. Specifically, claims 7, 13 and 14 are canceled. Claim 1 is amended to incorporate the subject matter of claim 7 and claim 8 is amended to incorporate the subject matter of claims 13 and 14. No issues of new matter are presented.

Upon entry of the amendment, claims 1-5 and 8-12 will be all of the claims pending in the application.

As amended, independent claims 1 and 8 more clearly recite that the supply gas at a second flow rate is from a different line than the supply of the reaction gas at the first flow rate to further distinguish the claimed invention over the prior art of record. Claims 1 and 8 are further amended to recite an "oxide film" when referring to the final film to further distinguish between the "film" in line 1 of the claims and the "initial film" recited later in the claims. Thus, the claims distinguish over the prior art of Li et al for the reasons set forth in the Response filed on September 30, 2003, which is incorporated herein by reference. Accordingly, Applicants respectfully request withdrawal of the rejections.

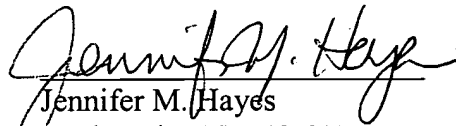
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.114(c)  
U.S. Application Ser. No. 09/832,093

Attorney Docket No. Q64059

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: January 2, 2004



**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q64059

Shigeo ISHIKAWA

Appln. No.: 09/832,093

Group Art Unit: 2823

Confirmation No.: 8684

Examiner: Khiem D. Nguyen

Filed: April 11, 2001

For: FILM FORMING METHOD IN WHICH FLOW RATE IS SWITCHED

**STATEMENT OF SUBSTANCE OF INTERVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please review and enter the following remarks summarizing the interview conducted on

December 3, 2003:

**REMARKS**

An Examiner's Interview Summary Record (PTO-413) was mailed on December 9, 2003.

During the interview, the following was discussed:

1. **Brief description of exhibits or demonstration:** None
2. **Identification of claims discussed:** All pending claims
3. **Identification of art discussed:** Li et al
4. **Identification of principal proposed amendments:**

a. Amending the independent claims to more clearly define that the supply of the reaction gas at the second flow rate is from a different line than the supply of the reaction gas at

the first flow rate such as by amending incorporating the subject matter of claim 7 into claim 1 and amending independent claim 8 in the same manner.

b. Amending the independent claims to distinguish the initial film from the final film formed.

**5. Brief Identification of principal arguments:**

a. Applicants pointed out that the present invention is directed to a method of forming a film, wherein an initial film is formed in the center portion of the wafer by the gas supply from a small flow rate line and then a film is formed on the whole wafer by the gas supply from both a small flow rate line and a large flow rate line, and we also pointed out that the timing of the gas supply timing is an essential feature of the claimed invention.

b. Applicants argued that Li et al, Publication No. 2002/0160113 (Lee et al '113), does not disclose, teach, suggest or even mention the gas supply timing from the central portion and the peripheral portion, much less the gas supply timing recited in claim 1 of the present application. It was argued that, at best, one of ordinary skill in the art may consider that the gas is supplied from the center nozzle 56 and the peripheral nozzles 34 and 34(a) at the same time, or that the gas is first supplied through peripheral nozzles 34, second through peripheral nozzle 34(a) and third through center nozzle 56 above the substrate based upon the disclosure and Fig. 3 of the reference. However, in any case, Li et al '113 does not specifically disclose the gas supply timing of the claimed invention and, therefore, cannot anticipate the claimed invention within the meaning of 35 U.S.C. § 102.

c. Applicants also pointed out that a similar rejection had been made using Okamoto et al as the primary reference in combination with Li et al '771 and the rejection was withdrawn in view

of the fact that Okamoto et al did not teach the flow timings and flow rates for different lines as in the claimed invention and Li et al '771 did not remedy the deficiencies of Okamoto et al.

d. Further, Applicants argued that Li et al '113 does not recognize the effect of the gas supply timing in the present invention and, therefore, one of ordinary skill in the art would not have been motivated to modify the disclosure of Li et al '113 with a reasonable expectation of achieving the claimed invention.

**6. Indication of other pertinent matters discussed:**

The Examiner suggested that the independent claims should be amended to distinguish between the initial film and the final film formed on the wafer.

**7. Results of Interview:**

The Examiner suggested that the independent claims should be amended to more clearly recite that the supply of the reaction gas at a second flow rate is from a different line than the supply of the reaction gas at the first flow rate.

The Examiner also suggested that Applicants amend the claims to further distinguish between the "film" in line 1 of claim 1 and the "initial film" in line 3 of claim 1 and "the film" formed on the "initial film" in line 7 of claim 1.

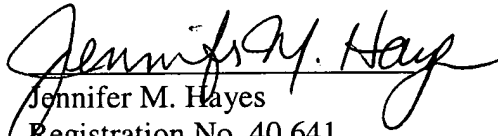
The Examiner indicated that the suggested amendments should distinguish the claimed invention over Li et al '113 and place the application in condition for allowance upon filing of an RCE, subject to further search and consideration. The Examiner also indicated that if another reference is found or other issues are presented after filing of an RCE with amendments to the claims as suggested, the Examiner would contact us by telephone to try and resolve any issues prior to issuing an Office Action.

Statement of Substance of Interview  
U.S. Application Ser. No. 09/832,093

Attorney Docket No. Q64059

**It is believed that no petition or fee is required.** However, if the USPTO deems otherwise, Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

  
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WASHINGTON OFFICE

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Date: January 2, 2004